

# Pairwise Sum and Divide

You are given an array of numbers. Let us denote the array with  $A[]$ . Your task is very simple. You need to find the value returned by the function  $\text{fun}(A)$ .

```
fun(A)
    sum = 0
    for i = 1 to A.length
        for j = i+1 to A.length
            sum = sum + Floor((A[i]+A[j]) / (A[i]*A[j]))
    return sum
```

In short, this function takes all distinct pairs of indexes from the array and adds the value  $\left\lfloor \frac{A[i]+A[j]}{A[i] \times A[j]} \right\rfloor$  to the sum. Your task is to find the sum.

**Note:**  $\left\lfloor \frac{A}{B} \right\rfloor$  is the integer division function.

## Input Format

The first line contains  $T$ , the number of test cases to follow.

Each test case contains two lines: the first line contains  $N$ , the size of the array, and the second line contains  $N$  integers separated by spaces.

## Output Format

The output should contain exactly  $T$  lines where the  $i^{\text{th}}$  line contains the answer for the  $i^{\text{th}}$  test case.

## Constraints

$$1 \leq T \leq 15$$

$$1 \leq N \leq 2 \times 10^5$$

$$1 \leq \text{Sum of } N \text{ over all test cases} \leq 2 \times 10^5$$

$$1 \leq A[i] \leq 10^9$$

## Sample Input

```
2
3
4 2 3
3
1 4 1
```

## Sample Output

```
0
4
```

## Explanation

$$\textit{First Test Case: } \left\lfloor \frac{6}{8} \right\rfloor + \left\lfloor \frac{7}{12} \right\rfloor + \left\lfloor \frac{5}{6} \right\rfloor = 0$$

$$\textit{Second Test Case: } \left\lfloor \frac{5}{4} \right\rfloor + \left\lfloor \frac{2}{1} \right\rfloor + \left\lfloor \frac{5}{4} \right\rfloor = 4$$